

# **Update on Current Court Operations and Data Special Report for the JDTC Team Training on Implementing Evidence Based Practice**

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## EXECUTIVE SUMMARY

By

Donald F. Anspach, Andrew S. Ferguson, and Laura L. Phillips

Maine is one of the pioneer states to have implemented a statewide drug court program for both adult and juvenile offenders. These programs have received national attention from numerous institutes, publications and funding sources. For example, Maine's two statewide drug court systems were among three programs selected to be reviewed and highlighted in the most recent issue of the official journal of the field – The National Drug Court Institute Review. More recently, the Bureau of Justice Assistance awarded Maine \$300,000 to further develop the MIS systems of the two drug court programs.

In 1999, Maine's legislature authorized the creation of a statewide juvenile drug treatment court program. The first juvenile was admitted to the program on January 26, 2000. Today, Maine's Juvenile Drug Treatment Court Program serves over two-thirds of Maine's population. Six District Court Judges are assigned to six juvenile drug courts in York, Cumberland, Androscoggin, Kennebec, Penobscot and Sagadahoc counties.

**Table 1: Comparison of the Productivity of Maine's Juvenile Drug Courts**

		<i>Juvenile Drug Treatment Court Sites</i>						
		<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
2000 Admissions		10	11	14	-	15	16	66
2001 New Admissions		9	14	12	-	15	14	64
2002 New Admissions		12	10	10	7	16	13	68
2003 Admissions as of September		11	7	9	8	8	9	52
Total Enrollments		42	40	45	15	53	51	246
Discharged- Expelled		24	19	23	6	24	20	116
Discharged- Graduated		8	12	10	1	15	16	62
Currently Active		10	9	12	8	14	15	68
	Phase 1	4	4	3	7	3	7	28
	Phase 2	5	3	5	1	5	5	24
	Phase 3	1	1	2	0	0	2	6
	Phase 4	0	1	2	0	6	1	10
Overall Graduation Rate		25%	39%	30%	14%	39%	44%	35%
National Estimate								29%

As of September 1, 2003, a total of 246 adolescents have been admitted into Maine's Juvenile Drug Treatment Court program, 62 successfully completed the program and graduated, 116 were expelled and 68 are still currently active. Successful program completion rates in Maine compare favorably with graduation rates of juvenile drug court programs nationally. Overall graduation rates for Maine's juvenile drug court (35%) exceed national estimates (29%).

Overall findings indicate a positive program effect with fewer juvenile drug court participants being arrested than a matched group of juvenile offenders who did not participate in drug court and fewer drug court graduates being arrested in a twelve month follow-up.

## **Key Findings**

- Juvenile drug court participants are less likely than a matched comparison group to be rearrested for new offenses.
- Juvenile drug court participants are significantly more likely than non-drug court participants to participate in substance abuse treatment.
- An analysis of offender characteristics reveals that the majority of participants are moderate to high risk, white males with fairly severe substance abuse histories.
- Offenders requiring a relatively low level of treatment intervention (scoring at ASAM level 1 or below) are three times less likely to recidivate than offenders requiring more intensive treatment interventions.
- The rate of in-program positive drug tests among juvenile drug court participants in Maine (24%) is lower than rates of positive drug tests for other adolescents in Maine's juvenile justice system (35%).
- Participants who are more frequently tested have lower rates of positive drug tests indicating that drug testing is a potential deterrent of future drug use.
- Participants who were arrested with a prior property related offense are 4.3 times less likely to graduate than participants with no prior property offenses.
- Participants who received drug education services are 5 times more likely to graduate than those who did not.

## Conclusions

The report provides a rigorous assessment of Maine's juvenile drug treatment court program. Overall, Maine's Juvenile Drug Treatment Court Program has made significant strides in implementing a model juvenile drug court system statewide. Transforming the drug court "concept" into actual practice, however, poses a number of operational and logistical challenges at both the state and local level. The Statewide Steering Committee and all key actors participating in these drug court programs should feel a sense of accomplishment for the hard work and personal investment each has made in building this model program.

The findings in this report indicate that the juvenile drug court is an effective intervention to reduce recidivism for substance abusing adolescent offenders. However, results from this and other studies should remind policy makers that juvenile drug courts are an effective diversion program for only some juvenile offenders with substance abuse problems. More realistic expectations about the potential impacts of juvenile drug courts but must be accompanied by continual improvements to the existing program.

Several limitations of the study also deserve recognition because they may effect the interpretation of results. First, there are an insufficient number of cases to conduct a site by site assessment of outcomes. Therefore, it is not possible to determine whether some drug court sites have better outcomes than others. Second, at the request of the Office of Substance Abuse the analysis which follows is based on four overlapping but related samples of juvenile participants. Productivity information is based on all 246 juveniles who participated in the program from the date of inception – January 26<sup>th</sup>, 2000, to September 1, 2003. The analysis of factors related to successful and unsuccessful program completion is based on 178 of juveniles who either graduated or were expelled from the program by September 1, 2003. The recidivism analysis is based on 105 drug court participants who were either expelled or graduated and a match pair of 105 non-participating juvenile offenders with similar substance abuse problems. Finally, the analysis of current program operations is based on 66 participants who were admitted between September 1, 2002 and September 1, 2003 (11 expelled participants and 55 currently active participants).

**Table 2: Participant and Program Characteristics and Recidivism Outcomes**

<b>Demographics</b>	<i>N=178</i>		<i>N=178</i>
% Male	84	ASAM	% Level 3 + 31
% White	95		% Level II (a & b) 30
% Employed	38		% Level II c 10
% In School	75		% Level II 21
% Living w/ Relatives	87		% Level I and Below 8
% Prior Arrest	87	Summary Score 21+	
% Prior Treatment	57		% Yes 96
% Prior Felony Arrest	22	Drug of Choice	% Alcohol 18
Mean Age	16.6		% Marijuana 62
Mean Age at First Arrest	15.0		% Heroin 14
Mean Age at First Use	11.9		% Other 6
		Yo-LSI Risk (n=132)	% Low 14
			% Moderate 44
			% High 42
<b>Program Information</b>	<i>N=178</i>		<i>N=178</i>
Tx Sessions per Week (avg.)	1.2	% Utilize Ancillary Services	76
Types of Tx Sessions (avgas%)		% Utilize Multiple Ancillary Services	64
Individual	51	Types of Ancillary Services	
Group	35	% Academic	16
Family	8	% Drug Education	55
IOP	3	% Mental Health Counseling	21
Residential	4	% Transportation	43
		% Other	42
Average % Positive Drug Tests	25		
Average Weekly Drug Tests	0.7		
<b>Recidivism Outcomes</b> Drug Court N=105; Comparison N=105; Graduate N=30			
Overall Arrest		Re-Arrest (Felony)	
Drug Court	54%	Drug Court	11%
Comparison	66%	Comparison	12%
Drug Court Graduate	40%	Drug Court Graduate	3%
Post Program Arrests		Re-Arrest (Drug/Alcohol Offense)	
Drug Court	43%	Drug Court	4%
Comparison	49%	Comparison	13%
Drug Court Graduate	30%	Drug Court Graduate	0%
In-Program Arrest		Re-Arrest (Crimes Against a Person)	
Drug Court	35%	Drug Court	13%
Comparison	34%	Comparison	15%
Drug Court Graduate	23%	Drug Court Graduate	17%

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# Section 1

## Introduction

Nationally, drug courts were developed as a means to respond to the complex problems posed by substance abusing offenders involved in the revolving door of the criminal justice system. The drug court model is believed to be one of the more promising approaches to integrate substance abuse treatment into the normal, daily operations of the court and supervision systems. After more than a decade of growth, the underlying tenets of the drug court model are now seen in a variety of specialized criminal court proceedings.

One of the earliest and most popular adaptations of the original adult drug court model are programs that target adolescent offenders – juvenile drug courts. Although similar in many respects, the juvenile drug court is designed to respond to the unique problems posed by substance abuse among adolescent offenders. Lack of maturity, sense of invulnerability as well as negative influences of peers, gangs, and the common abuse of substances among family members are some of the many challenges faced in attempting to motivate juvenile offenders to change.

The first juvenile drug court program originated in Key West, Florida in 1993 (Belenko, 2001) and since then, juvenile drug courts have expanded considerably over the past decade. Today, there are more than 250 juvenile drug courts in operation or in various stages of planning across forty-six states and the District of Columbia. Nationally, more than 14,000 adolescents have enrolled in drug court programs and over 4,000 have successfully completed these programs and graduated (Cooper, 2003). The underlying strength and continued expansion of drug court programs undoubtedly rests upon the cooperation and collaboration that exists between the judiciary and an array of public and private sector agencies that provide treatment, aftercare and ancillary services to participants.

The State of Maine is one of the pioneer states to have fully developed a state-wide system of drug courts for both adult and juvenile offenders. Currently, Maine has six juvenile drug courts operating in seven counties that serve a combined population of 883,410 people – or approximately 70% of the state's population. The first juvenile drug court program became operational in January, 2000 when the first adolescent was admitted to the Bangor juvenile drug court in Penobscot County (pop. 144, 919) with the Honorable Ann Murray presiding. The Honorable Christine Foster presides over the York County (pop. 186,742) juvenile drug court and the Honorable Keith Powers presides over the Cumberland County (pop. 265,612) juvenile drug court and chairs the State-wide Juvenile Drug Court Steering Committee. The Honorable Joseph Field presides over the juvenile drug court serving both Sagadahoc (pop. 35,214) and Lincoln Counties (pop. 30,016). The Honorable Vendeen Vafiadas presides over the Kennebec County (pop. 117,114) juvenile drug court and the Honorable Paul Cote presides over the juvenile drug court in Androscoggin County (pop. 103,793).

Since its implementation in January 2000, a total of 246 adolescents have been admitted into these drug courts, 62 have successfully completed the program and graduated, 116 were expelled and 68 are still currently active as of September 1, 2003 (Table 1). In addition, graduation rates for Maine's juvenile drug court compare favorably with graduation rates of

juvenile drug courts nationally. Overall graduation rates for Maine's juvenile drug court (35%) exceed national estimates (29%). However, graduation rates are variable and range from a low of 14% in the Lewiston drug court<sup>1</sup> to a high of 44% in West Bath.

**Table 1: Comparison of the Productivity of Maine's Juvenile Drug Courts**

	<i>Juvenile Drug Treatment Court Sites</i>						
	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
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Phase 1	4	4	3	7	3	7	28
Phase 2	5	3	5	1	5	5	24
Phase 3	1	1	2	0	0	2	6
Phase 4	0	1	2	0	6	1	10
Overall Graduation Rate	25%	39%	30%	14%	39%	44%	35%
National Estimate							29%

Maine's juvenile drug court is a court supervised, *post-plea* (but pre-final disposition) drug diversion program providing comprehensive community based treatment services to juvenile offenders and their families. The drug court requires weekly court appearances before the designated program judge, participation in substance abuse treatment, and compliance with program requirements. The program has four phases and is designed to take approximately 12 months to successfully complete.

The program receives primary funding from the Juvenile Accountability Incentive Block Grant (JAIBG) with matching funds provided by Maine's Office of Substance Abuse. The program also receives funding from the Office of Justice Programs, Drug Court Programs Office, to provide ongoing training for drug court team members.

In order to assess the structure and operations of juvenile drug court programs and plan for their future development, Maine's Office of Substance Abuse in consultation with Maine's Judicial Department, contracted researchers from the College of Arts and Sciences at the University of Southern Maine to evaluate the program. Donald F. Anspach and Andrew S. Ferguson served as co-principal investigators for the project working in collaboration with research staff Laura Phillips, Michelle Baker, Jody Giambatistta and Edith Hale. The Honorable Keith Powers from Maine's Judicial Department, Linda Frazier of Maine's Office of Substance Abuse, and Ron Anton and Jane Clark from Day One, Inc. have served as the primary juvenile drug court officials involved in the evaluation. In addition, Maine's Department of Corrections, Division of Juvenile Services and Maine's Department of Public Safety deserve special acknowledgements for providing research staff access to criminal history information.

<sup>1</sup> The Lewiston juvenile drug court became operational in January, 2002 approximately two years after initial implementation.

This report is part of an ongoing, cross-site evaluation of Maine's juvenile drug court program. Intended to complement and augment the "final outcome evaluation report" (September 17, 2003) by presenting data on current participants, this report will present information on four overlapping cohorts of participants. The report is organized as follows: The next section provides an overview of current program operations and activities for the 66 participants who were admitted to the drug court on or after September 1, 2002 to August 31, 2003. Here we examine several core components of the drug court model including drug testing, sanctions and incentives, treatment attendance, case management supervision, and ancillary service utilization. The third section of the report examines factors predicting program completion outcomes for the 178 adolescents who were discharged from the program either through graduation or expulsion from the programs inception through August 31, 2003. The last section of the report examines factors predicting recidivism outcomes

Because it includes one of the first outcome assessments utilizing a quasi-experimental research design, this study is unique among juvenile drug court program evaluations that have been conducted to date. The outcome portion of the evaluation uses a quasi-experimental matched pair design. It compares arrests for 105 juvenile drug court participants for a twelve month post-program follow-up with a control group of 105 similarly situated adolescent offenders traditionally adjudicated. The control group was constructed from data obtained from Maine's Department of Corrections and the Juvenile Treatment Network (Day One). Offenders were matched across a variety demographic characteristics, substance use history/screening results and criminal risk factors including: age, race, gender, county of residence, ASAM score, drug and alcohol score, Yo-LSI criminal risk, living situation and school status. The study also incorporates results from a survey of key actors participating in the juvenile drug court program. The fieldwork for the study was conducted over an eighteen month period beginning January 1, 2002 and ending June 30, 2003.

Overall findings indicate a positive program effect with fewer juvenile drug court participants being arrested than the control group and program graduates being the least likely to re-offend overall. Juvenile drug court participants are also less likely than the control group to be rearrested for alcohol or drug related offenses or for the commission of violent crimes.

Several limitations of this study deserve recognition because they may have important impacts on the interpretation of outcomes. The analyses about recidivism outcomes is based upon a total of 105 participants who either graduated or were expelled from the drug court program at least 15 months prior to the publication of this report. Hence, the outcomes are skewed towards offenders participating in the initial period of program operations. Lastly, since there are an insufficient number of cases to conduct a site by site assessment outcomes, it is not possible to determine whether some drug court sites have better outcomes than others.

## Section 2

### Overview of Current Program Operations

This section of the report provides an assessment of current drug court program operations and practices. The analysis is based upon a total of 66 participants who were admitted to the drug court between September 1<sup>st</sup> 2002 and August 31<sup>st</sup> 2003. Here we report on current referral and admissions related procedures, drug testing, case management contacts, the role of sanctions and incentives as well as substance abuse treatment attendance and ancillary service utilization.

#### **A. Referral and Admission**

The policy of Maine's juvenile drug court is to target adolescents who: (1) a medium to high risk of criminal recidivism; 2) a substantial substance abuse problem; (3) an ability to participate in treatment for substance abuse; and (4) has a parent or other important adult figure who is willing to participate or, at a minimum, play an active role in the juvenile's participation in the program.

Although a variety of agencies or persons including the district attorney, juvenile community corrections officers (JCCO's), defense counsel, school officials, or any other interested persons may refer juveniles to the drug court program, the majority of referrals come from JCCO's (79%) and defense counsel (17%).

JCCOs are the primary gatekeepers to the juvenile drug court program. They are responsible for determining initial program eligibility and conducting referrals. This initial determination is based, in part, upon results of the Youthful Offender Level of Service Inventory (Yo-LSI) which is a screening tool used to measure risk of re-offending.

If screening eligibility requirements are met, adolescents are then recommended for a clinical assessment. The clinical assessment is conducted by the drug court case manager and consists of interviews, observations, additional standardized testing tools as well as file reviews of school records, DOC case files, and medical and mental health histories. Additional testing tools include the Practical Adolescent Dual Diagnostic Interview (PADDI) and the Circumstances Motivational and Readiness Scales (CMRS). Additional factors taken into consideration include: extent of drug or alcohol abuse, mental health history, family and social relationships, medical/health care history, housing status, education, psychological functioning, nature of current and previous charges, and criminal risk level. The clinical assessment process is fairly time consuming taking approximately four to six hours to complete.

When the clinical assessment is completed, the drug court team reviews the entire case file before deciding whether or not to admit the offender to the program. A juvenile may only be accepted into the drug court at a hearing and by order of the court. This requires the juvenile to enter an admission to pending charges or accept a motion to revoke probation. The juvenile must be represented by legal counsel at this hearing and must have the consent of his or her parent or

legal guardian to participate in the program. Juveniles not admitted to the drug court program are returned to court for traditional adjudication.

Upon admission, the juvenile is informed of the conditions and requirements of participation in the drug court, including conditions of release. The drug court case manager provides a written schedule of court sessions and the substance abuse treatment program. At this point the participant enters the initial phase of the drug court. Overall, this entire process – the time between initial referral to final admission – takes an average of 49 days with a range of 7 days to 280 days to successfully complete. As shown in Table 2, this time-frame essentially holds across courts with the greatest differences between Augusta (39 days) and Biddeford (65 days)<sup>2</sup>.

**Table 2: Time Between Initial Referral and Admission (days)**

	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
Length of Time from Referral to Admission							
Mean	38.6	40.8	64.5	54.7	44.9	50.3	48.8
Median	35.0	28.0	31.5	33.0	31.0	31.0	32.0
Range	20-64	21-161	30-280	27-134	7-128	24-152	7-280
N	13	11	12	9	10	11	66

## B. Drug Testing

The frequent and effective use of random and monitored drug and alcohol testing is the *5th key component* of drug courts. Reliable and valid drug testing practices ensure compliance with the abstinence requirement of the program and identifies when appropriate action is necessary due to non-compliance. Drug tests also highlight levels of program integrity while providing a means for the criminal justice system to perform an important public safety function. In addition, drug testing provides treatment professionals valuable information about participant substance use and aids in the modification of an appropriate treatment plan.

A careful examination of the drug testing protocol is essential to assess the overall effectiveness and success of the program. This section provides an overview of what key actors think about drug testing and drug testing practices and compares this information with actual drug testing data accumulated for each individual participant.

Key actors were questioned about how often they believed clients should be drug tested at each phase of treatment and whether they believed the frequency and quality of existing drug testing practices were adequate. Key actors generally believe that the frequency of drug testing should be based on a “step-down system” where testing frequency decreases as participants progress through program phases. Overall, 82% believe that participants should be tested more than once per week during the first phase of the program. This frequency decreases to 78% in Phase II, 39% in Phase III and 23% of respondents indicated that participants should be tested more than once per week during the last phase of the program.

<sup>2</sup> To ameliorate the effects of delays in admissions, some courts have admitted juveniles on a provisional basis pending receipt of their final clinical assessment.

How often are participants actually tested during each phase? Table 3 shows that the frequency of drug testing across sites does indeed occur more than once a week overall ranging from a low 1.1 tests per week at Bangor and West Bath to a high of 1.9 tests per week in Biddeford. However, the frequency of drug testing remains relatively flat across phases which does not reflect the “step-down system” recommended by policy and supported by key actors in the drug court program.

**Table 3: Cross-site Comparison of Drug Testing Practices**

Average Number of Drug Tests Administered per week	<i>Juvenile Drug Treatment Court Sites</i>						
	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
Phase 1	1.1 (13)	1.0 (11)	2.2 (12)	1.9 (9)	1.4 (10)	1.0 (11)	1.4 (66)
Phase 2	2.0 (5)	1.2 (5)	1.7 (8)	1.0 (1)	1.4 (2)	1.3 (5)	1.7 (26)
Phase 3	1.0 (1)	1.4 (2)	1.3 (3)	-	-	0.4 (1)	1.2 (7)
Phase 4	-	1.0 (1)	2.4 (1)	-	-	1.0 (1)	1.4 (3)
Overall	1.2 (13)	1.1 (11)	1.9 (12)	1.8 (9)	1.4 (10)	1.1 (11)	1.4 (64)

### C. Drug Testing Outcomes

An absence of positive drug tests is one way of assessing participant compliance with the abstinence requirement of the program. Referring to Table 4, 74% of the 66 participants tested positive one or more times for alcohol or drugs. The percent of participants with no positive drug tests range from a low of 9% in Bangor to a high of 39% in Augusta. Among those participants testing positive, the frequency of positive tests range from a low of 1 to high of 15 positive tests per person. The median number of positive tests is 3 and ranges from a low of 1.5 in Lewiston to a high of 7.0 in West Bath.

Overall, the percent of positive tests ranges from a low of 10% in Biddeford to a high of 29% in Augusta and Lewiston. With an overall percent positive rate of 22%, Maine juvenile drug courts compare favorably both with the national average for drug court participants (24%) and with other adolescents in the juvenile justice system where positive drug test rates exceed 35%<sup>3</sup>.

<sup>3</sup> “Juvenile Drug Court Activity Update: Summary Information, OJP Drug Court Clearinghouse and Technical Assistance Project. American University.

**Table 4: Cross-site Comparisons of Drug Testing Results**

	<i>Juvenile Drug Treatment Court Sites</i>						
	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
Average Percent Positive Tests	29%	21%	10%	29%	13%	28%	22%
Participants Testing Positive							
% None	39%	9%	8%	33%	30%	36%	26%
% One	23%	18%	25%	33%	30%	-	21%
% Two or More	39%	73%	67%	33%	40%	64%	53%
N	13	11	12	9	10	11	66
Participants with Positive Tests							
Mean	4.5	3.5	3.0	3.5	3.9	7.4	4.2
Median	2.5	3.0	2.0	1.5	2.0	7.0	3.0
Range	1-15	1-8	1-6	1-9	1-10	3-13	1-15
N	8	10	11	6	7	7	49

#### **D. Case Management Supervision**

One of the critical operating features of the drug court model is the supervision of participant progress throughout the course of the program. Case managers are in daily contact with the participants through phone calls or site visits. Some days they see a participant and their family multiple times at the participant's home, school, or workplace. The case managers keep in contact with the schools, administer drug tests, and otherwise monitor the participant's progress and compliance with the program's rules and requirements.

Table 5 provides a cross-site analysis of the frequency of contacts per week as well as whether these contacts were conducted in person or at the participants home. Overall, each participant is contacted, on average, at least two times per week and more than two-thirds of these contacts are conducted in person. Approximately 1 out of every 5 contacts is conducted at the participants home. The median number of contacts range from a low of 1 in West Bath to a high of 3 in Lewiston and the percent of contacts conducted in person range from a low of 56% in Lewiston to a high of 82% in West Bath.

**Table 5: Cross-site Comparison of the Frequency of Case Management Supervision**

	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
Contacts per week							
Mean	1.9	1.6	2.7	2.6	2.5	1.2	2.1
Median	1.1	1.4	2.7	3.0	2.8	1.0	1.9
Range	0-9	0.1-4.2	0.2-5.3	0-4.5	0.2-3.7	0.3-2.0	0-9
N	13	11	12	9	10	11	66
Percent of Contacts In Person							
Mean	59%	76%	74%	56%	62%	82%	68%
N	13	11	12	9	10	11	66
Percent of Contacts in Home							
Mean	24%	19%	22%	3%	18%	16%	18%
N	13	11	12	9	10	11	66

## E. Role of Sanctions and Incentives

Theoretically, sanctions and rewards have the potential to be important ingredients for a program of behavioral management (Marlowe, 2002). Like other juvenile drug courts nationally, Maine's juvenile drug courts use rewards and sanctions to ensure compliance to program goals and objectives. However, Maine currently does not use a structured sanctions protocol. Rather, the imposition of rewards and sanctions is handled on a case-by-case basis depending upon staff's perception of the participants' overall performance in the program as discussed in pre-court staffings. The judge imposes these sanctions and rewards during weekly status hearings.

Nationally, there is a paucity of research information about the use of sanctions and rewards, especially among juvenile drug court programs. Drug court evaluations to date, have neither examined whether sanctions and rewards are tied to the performance expectations of the drug court nor controlled for the temporal ordering of sanctions. To fill this gap in the existing research literature this study examines the role of sanctions and rewards both within and across juvenile drug court programs in Maine.

Upon admission to the drug court, participants consent to the use of these sanctions. Typically, sanctions are imposed for violations of program rules and regulations such as: positive urinalysis, technical violations, new criminal activity, failure to attend scheduled meetings with probation, case management, treatment, insubordination or other offensive behavior. Rewards are given for compliance with program requirements. Information provided in this section is based upon case management records and from results of the survey administered in March, 2003.

The initial decision to sanction or reward a participant typically occurs during a review of participant progress at weekly staffing sessions. At the staffing, the drug court team arrives at a consensus upon a particular course of action to take in the weekly status hearing. Indeed, the ability to arrive at a consensus, or make a team decision, is an important indicator of the level of cooperation and collaboration that exists among drug court team members. According to survey results, the majority of drug court team members (excluding judges) indicate that they believe their opinions play a major role in the court's decision to sanction or reward participants. In addition, key actors were also presented with three scenarios and asked to identify the kind of intervention (sanction) that should occur and what they believed would likely take place in the status hearing.

With the exception of one case, there was no difference between what key actors thought "should happen" and what they believed was "likely to happen" in the courtroom. (Refer to Appendix A for survey results.) Yet, when asked about the overall effectiveness of the use of these sanctions and incentives, nearly half (46%) of team members indicated that current use of sanctions and incentives is not an effective tool to secure compliance to program requirements.

Table 6 provides an overall distribution of the frequency of actual sanctions and rewards participants received during drug court. Among those sanctioned, the number of sanctions range from 1 to 13 with a median of 4. There are cross-site differences, however, in the frequency of sanctions administered. On average, participants in Portland and West Bath receive more sanctions than participants in Lewiston and Augusta. With the exception of one site, participants receive on average more rewards than sanctions. Overall, participants receiving rewards ranged from 1 to 32 with a median of 5. The overall ratio of rewards to sanctions is 1.9:1.



**Table 6: Cross-Site Comparison of the Frequency of Rewards and Sanctions**

		<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
Distribution of Sanctions								
Number of Sanctions	Mean	2.3	3.6	4.7	2.5	7.0	6.1	4.5
	Median	2.0	4.0	4.5	1.5	7.0	6.0	4.0
	Range	1-6	1-8	1-12	1-7	2-13	1-12	1-13
	N	9	11	12	8	9	10	59
Distribution of Rewards								
Number of Rewards	Mean	4.0	4.1	14.2	3.1	14.0	4.3	7.9
	Median	2.0	2.0	13.5	2.0	12.0	3.0	5.0
	Range	1-12	1-9	2-32	2-7	4-28	1-12	1-32
	N	9	9	12	7	10	10	57

Table 7 presents information on the distribution of types of sanctions and rewards imposed at each site. The most frequent reward is praise or applause from the bench (45%) followed by curfew extensions (19%) and tangible rewards (14%) such as gift certificates. The most frequent type of sanction is detention (32%) followed by house arrest (27%) and community service (11%). There are cross-site variations in both the frequency and types of rewards and sanctions imposed. As discussed above, detention is the most frequently imposed sanction. However, courts that use detention range from a low of 5% in Lewiston to a high of 48% in Biddeford. Rewards also vary by site. For example, use of curfew extensions range from a low of 0% in Lewiston to a high of 31% in Biddeford.

**Table 7: Cross-site Comparisons of the Types of Rewards and Sanctions**

		<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
Types of Sanctions								
	Detention	30	43	48	5	28	25	32
	Written Assignment	16	3	11	10	3	3	7
	Curfew Restriction	5	5	2	-	8	2	4
	Community service	-	15	16	5	9	15	11
	Verbal Caution Only	2	8	2	10	14	10	8
	House Arrest	36	8	14	45	25	41	27
	Termination	9	8	2	5	3	-	4
	Other	2	13	5	20	9	5	8
		100%	100%	100%	100%	100%	100%	100%
	N	44	40	56	20	64	61	285
Types of Rewards								
	Praise/Applause/Handshake	37	16	54	68	47	40	45
	Curfew Extension	5	22	31	-	26	2	19
	Phase Advancement	10	24	8	9	3	19	9
	Tangible	34	22	1	9	13	7	14
	Other	15	16	7	14	11	33	13
		100%	100%	100%	100%	100%	100%	100%
	N	137	37	170	22	140	43	549

In order to examine the relationship between non-compliance with program protocols and the particular types of sanctions imposed, the research team examined sanction data for positive drug screens. Table 8 presents information on the types of sanctions imposed on 49 drug court participants who were sanctioned for positive drug tests. Overall, the most frequent response to a positive urinalysis is detention (53%) followed by house arrest (28%). Other types of sanctions

imposed for positive drug use range from written assignments (5%) to community service work (4%). Findings in Table 8 also indicate variations among drug courts in the types and frequency of sanctions imposed for positive drug tests. For example, use of detention ranges from a low of 8% in Lewiston to a high of 85% in Biddeford.

**Table 8: Cross-site Comparisons of Participants Sanctioned for Drug Use**

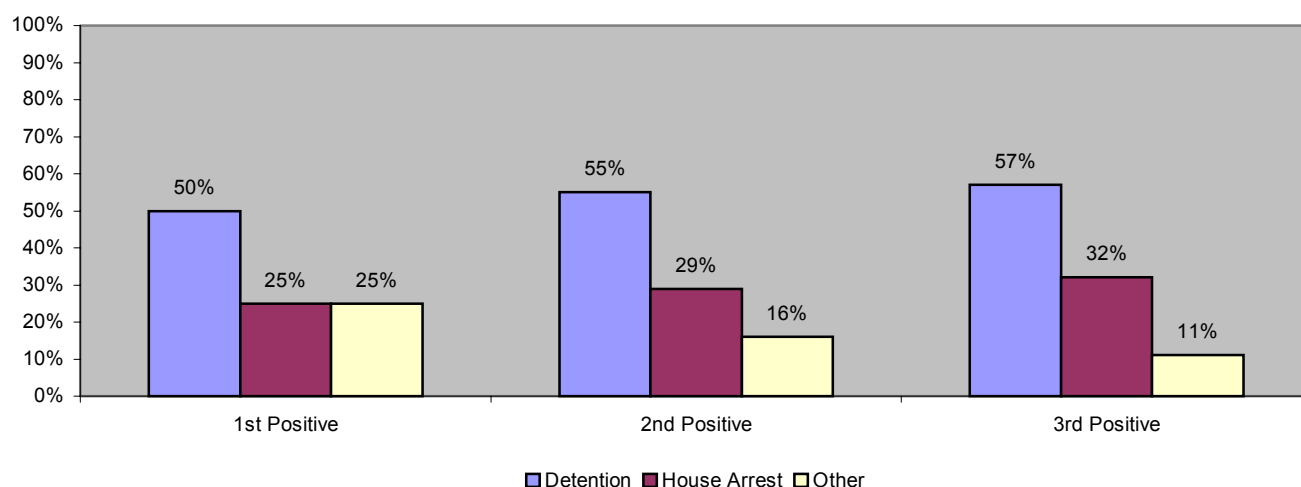
	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
Types of Sanctions Given for Drug Use							
Detention	41	60	85	8	64	46	53
Written Assignment	24	4	-	8	-	-	5
Curfew Restriction	6	-	-	-	-	-	1
Community service	-	15	-	-	-	4	4
Verbal Caution Only	-	4	5	-	-	-	2
House Arrest	29	12	5	68	36	42	28
Termination	-	8	-	-	-	-	2
Other	-	-	5	17	-	8	4
	100%	100%	100%	100%	100%	100%	100%
N	17	26	21	13	14	26	117

Data presented in Table 9 examines whether sanctions are graduated for persistent drug use. That is, we examined the sanctions imposed on participants for their first, second, and third successive positive drug test. Findings indicate that sanctions are graduated, however, only slightly. Moreover, there is a great deal of consistency across sites in response to positive drug use with each site in agreement that a participants should be restrained either through the use of house arrest or detention.

**Table 9: Temporal Order of Sanctions for Positive Drug Tests**

	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
1 <sup>st</sup> Positive							
Detention	44%	40%	82%	20%	50%	43%	50%
Written Assignment	44%	10%	-	20%	-	-	13%
Community Service	-	40%	-	-	-	-	8%
Verbal Caution	-	-	9%	-	-	-	2%
House Arrest	11%	10%	9%	60%	50%	43%	25%
Other	-	-	-	-	-	14%	2%
N	9	10	11	6	6	7	49
2 <sup>nd</sup> Positive							
Detention	25%	71%	86%	-	75%	29%	55%
Curfew Restriction	25%	-	-	-	-	-	3%
Community Service	-	-	-	-	-	14%	3%
House Arrest	50%	14%	-	50%	25%	57%	29%
Termination	-	14%	-	-	-	-	3%
Other	-	-	14%	50%	-	-	7%
N	4	7	7	2	4	7	31
3 <sup>rd</sup> thru 8 <sup>th</sup> Positive							
Detention	50%	67%	100%	-	75%	58%	57%
Verbal Caution	-	11%	-	-	-	-	3%
House Arrest	50%	11%	-	80%	25%	33%	32%
Termination	-	11%	-	-	-	-	3%
Other	-	-	-	20%	-	8%	5%
N	4	9	3	5	4	12	37

**Figure 1: Temporal Order of Sanctions for Positive Drug Tests**



## **F. Substance Abuse Treatment**

The fourth *key component* of the drug court model is to *provide access to a continuum of alcohol, drug, and other related treatment and rehabilitation services*. In this respect, community-based treatment providers play a central role in drug court programs. While the justice system maintains authority over participants to ensure compliance with the treatment protocol and performance requirements of the drug court, the treatment system delivers the necessary services to produce the intended behavioral changes.

However, there are a number of obstacles that limit implementing and delivering a continuum of care within any community. The local health-care economy with its own limited resources, economic competition, professional loyalties, referral bias and third party reimbursements often constrain the range of available options (Hester and Miller, 1995). The absence of truly different treatment options often results in the delivery of the same treatment program to both adult and adolescent populations. A standard formula often pervades what on the surface appear to be different treatment interventions (Hester and Miller, 1995).

Moreover, the availability of treatment counselors across communities is uneven as is their expertise. The drug treatment service system consists of a number of independent treatment providers who often deliver treatment according to their own predilections and personal philosophies. Liddle, Friedman, and Miller, among others, have concluded that many of the most common treatment interventions provided to adolescents (such as non-directive counseling, reality therapy, 12-step groups, and psychoanalytic therapy) are either unsuccessful, ineffective or of unknown value as treatment interventions. Motivational enhancement therapy (MET), cognitive behavioral therapy (CBT), and family treatment interventions (FTI), on the other hand, consistently show the best outcomes in such studies, however, they are widely under utilized by treatment providers.

A further constraint centers on the broad diversity of potential clients who are served and limited client resources. In particular, criminal justice involved clients have funding constraints limiting the services that are available. Such obstacles potentially compromise engaging juvenile drug court participants in scientifically proven treatment interventions (Taxman, 2000).

The State of Maine is responding to these problems. The creation of a statewide Juvenile Treatment Network and a training grant for treatment personnel are ways to address some of these issues. For example, given that many substance abuse providers in Maine are not trained in the use of scientifically based approaches to treatment, Maine's Office of Substance Abuse applied for and received an enhancement grant from the Office of Justice Programs, Drug Court Programs Office, to provide training for counselors in the "best practices" of substance abuse treatment for juvenile drug court participants.

Here, we examine variation in treatment duration as well as variation in both the types and frequency of treatment interventions employed (see Sections 3 and 4 for more information about the relationship between these interventions on discharge and recidivism outcomes). Data presented in this section of the report derive from records maintained in the drug court case management MIS and the Office of Substance Abuse, Treatment Data System (TDS).

Juvenile drug court participants receive a variety of treatment services ranging from individual, group, and family counseling to intensive outpatient and residential services. Table 10 shows the types of treatment services actually received. Referring to Table 10, the majority of participants receive individual counseling (54%) followed by group therapy (38%). Other types of treatment interventions occur with much less frequency. (Note: it will be impossible to evaluate the impact of individual versus group counseling. Only three participants did not receive a combination of both during treatment).

The types of treatment interventions as well as the frequency of attendance at treatment varies considerably across sites. For example, individual counseling (81%) is the dominant treatment modality in Augusta whereas in West Bath, group therapy (67%) is the most frequently employed intervention. And, the median number of substance abuse treatment sessions attended by participants ranges from a low of 0.8 sessions per week in Lewiston to a high of 2.8 sessions per week in Bangor.

**Table 10: Average Percent of Treatment Modality Used by Court**

	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
Types of Tx Interventions							
Individual	81	15	65	58	68	30	54
Group	17	62	28	42	18	67	38
Family	-	12	1	-	2	1	2
IOP	-	-	2	-	8	3	2
Residential	2	12	4	-	-	-	3
	100%	100%	100%	100%	100%	100%	100%
N	13	11	12	9	10	11	66
Average Tx Session (wk.)							
Mean	1.5	2.8	1.5	0.9	1.5	1.5	1.6
Median	1.6	2.8	1.5	0.8	1.3	1.4	1.4
Range	0.2-3.2	0.1-5.3	0.8-2.2	0.2-1.9	0.5-5.0	1.1-2.4	0.1-5.3
N	13	11	12	9	10	11	66

## G. Ancillary Services

Recognizing that substance abuse treatment alone often fails to meet the multiple needs of the offender population, the 4<sup>th</sup> *key component* of drug courts emphasizes that a “continuum of care” include the provision of an array of ancillary services in addition to substance abuse treatment. Data provided on ancillary service utilization was derived from a combination of case management records and information provided by the Office of Substance Abuse Treatment Data System (TDS).

In Maine, little or no funding is being provided the drug court program to deliver or facilitate the delivery of ancillary services. Nevertheless, many juvenile drug court participants have been able to avail themselves of a number of ancillary services on an ad hoc basis including: academic assistance, crisis intervention services, health care, mental health counseling, employment, transportation and a wide variety of other ancillary services. In fact, the majority of participants (62%) have utilized at least one ancillary service during their participation in drug court and 29% have utilized two or more services (See Table 11 following page).

Overall, mental health counseling (26%) and additional case management services (24%) were among the most frequently utilized services. Drug education (18%) and academic and vocational assistance (17%) were among the other types of services accessed by juvenile drug court participants. (Refer to Sections 8 and 9 for more information about the relationship between ancillary services and graduation and recidivism outcomes.)

**Table 11: Overall Distribution of the Types of Ancillary Services Accessed by Juvenile Drug Court Participants**

	<i>Juvenile Drug Treatment Court Sites</i>						
	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>	<i>Total</i>
% Utilize Any Ancillary Services	54	82	25	78	40	100	62
% Utilize Multiple Ancillary Services	31	46	17	22	30	27	29
N	13	11	12	9	10	11	66
	100%	100%	100%	100%	100%	100%	100%
Types of Ancillary Services (%)							
Academic/Vocational	8	18	17	-	10	46	17
Drug Education	23	36	8	-	20	18	18
Mental Health	39	18	8	44	10	36	26
Additional Case Management	15	56	-	33	10	36	24
Other	23	50	8	22	30	9	23

\*Other ancillary services include: Social Services, Mentoring Programs, Housing, Employment and Financial Services and Transportation

## Section 3

### Graduation and Termination Outcomes

Previous sections of this report addressed the overall structure of each drug court, the use of sanctions and rewards, and the delivery of substance abuse treatment and ancillary services. In the final sections of the report, concern lies with the efficacy of the juvenile drug court program as it relates to participant level outcomes. This section and the one that follows examine factors related to completion of the program through graduation and factors related to recidivism outcomes.

The successful completion of drug court requires participants to comply with certain performance expectations of the court including no new criminal conduct, abstaining from alcohol and drug use, and attending substance abuse treatment. The analysis that follows is based upon a total of 178 participants who either graduated (n=62) or were expelled (n=116) from the drug court program from its inception in January 2000 to August 31, 2003. The purpose of this section of the report is to identify what factors (if any) are related to successful completion of the juvenile drug court program.

The analysis is presented in two stages. The first stage involves simple bivariate comparisons and tests for differences of means between participant characteristics and core components of the drug court program on discharge outcomes. The dependent variable is rate of program graduation (0-100%). T-tests are performed on all dichotomous variables and analysis of variance is analyzed for all continuous variables and variables involving multiple categories.

The second stage of the analysis introduces a multivariate statistical technique called logistic regression. The purpose for using logistic regression is to examine what variables are related to successful completion of the program (graduation). The logistic regression analysis will enable us to simultaneously 1) “control” for offender characteristics so as to ascertain which compliance requirements of the program are significant in predicting graduation outcomes; and conversely 2) isolate participant characteristics significant in predicting graduation outcomes while controlling for the effects of compliance with program protocols.

#### **A. Participant Characteristics and Program Completion Outcomes**

This section examines the relationship between several general characteristics of participants on graduation outcomes. As shown in Table 12, the majority of participants can be characterized as moderate to high risk, white males with fairly severe substance abuse histories (see columns labeled %). Overall, there are two significant characteristics related to successful completion of the drug court program. Participants with prior arrests (31%) are less likely to graduate than participants with no prior arrests (56%). Participants characterized as “low” risk (43%) from the Yo-LSI are also more likely to graduate than “moderate” (13%) or “high” risk participants (15%).

**Table 12: Participant Characteristics by Discharge Status**

Demographics		%	N	% Graduate	Demographics		%	N	% Graduate
Gender	Female	16	28	46	Race	White	95	169	34
	Male	84	150	33		Non-White	5	9	44
	Total	100	178	35		Total	100	178	35
Employed at Admission	Yes	38	67	40	In School at Admission	Yes	75	133	37
	No	62	111	32		No	25	45	29
	Total	100	178	35		Total	100	178	35
Drug of Choice	Alcohol	18	33	36	Living with Relatives	Yes	87	155	36
	Marijuana	62	111	26		No	13	23	30
	Heroin	14	24	22		Total	100	178	35
	Other	6	10	33					
	Total	100	178	29	Yo-LSI Risk	Low	14	18	43*
						Moderate	44	58	13
ASAM Level	Level 3 and Higher	31	44	30		High	42	56	15
	Level II (a & b)	30	43	29		Total	100	132	17
	Level II c	10	14	-	Prior Tx Experience	Yes	57	102	34
	Level II	21	31	32		No	43	76	36
	Level I and Below	8	11	38		Total	100	178	35
	Total	100	143	29					
Sum Score of 21+	Yes	96	137	33	Prior Felony Arrest	Yes	22	31	32
	No	4	6	67		No	78	112	35
	Total	100	143	34		Total	100	143	34
Prior Arrest*	Yes	87	125	31*					
	No	13	18	56					
	Total	100	143	34					

\*\*\*p<.001, \*\*p<.01, \*p<.05; two-tailed tests

## B. Program Participation and Discharge Outcomes

We also examined the relationship between various core components of the drug court model on graduation outcomes. Findings in Table 13 indicate there are several significant differences between graduates and expelled participants on measures of positive drug use, frequency of rewards as well as utilization of other types of ancillary services. However, there were no significant differences between graduates and those expelled across both measures of treatment (frequency of attendance and type).

**Table 13: Program Information by Discharge Status**

		<i>Graduated (n=62)</i>	<i>Expelled (n=116)</i>	<i>Total (n=178)</i>
Ideal Length of Drug Court: 52 weeks				
Actual Length	Mean	<b>60</b>	32	41
	Median	<b>59</b>	29	44
	Range	<b>31-93</b>	2-82	2-93
Ideal Length of Phase 1: 8 –10 weeks				
Actual Length	Mean	<b>19</b>	20	19
	Median	<b>18</b>	18	18
	Range	<b>5-34</b>	2-62	2-62
Ideal Length of Phase 2: 20 weeks				
Actual Length	Mean	<b>19</b>	18	19
	Median	<b>18</b>	16	18
	Range	<b>4-35</b>	2-45	2-45
Ideal Length of Phase 3: 12 weeks				
Actual Length	Mean	<b>13</b>	12	13
	Median	<b>13</b>	11	11
	Range	<b>5-36</b>	1-34	1-36
Ideal Length of Phase 4: 10 weeks				
Actual Length	Mean	<b>10</b>	17	11
	Median	<b>10</b>	15	10
	Range	<b>1-23</b>	4-34	1-34
Frequency of Treatment Sessions				
	Mean	<b>71</b>	37	49
	Median	<b>58</b>	30	37
	Range	<b>13-230</b>	0-164	0-230
Duration of Treatment (weeks)				
	Mean	<b>39</b>	19	25
	Median	<b>43</b>	13	21
	Range	<b>5-76</b>	0-62	0-76
Treatment Sessions Attended per Week				
	Mean	1.3	1.2	1.2
	Median	1.0	1.0	1.0
	Range	0.14-3.4	0-4.0	0-4.0
Types of Tx Attended (avg. % of Total)				
	Individual	54	50	51
	Group	32	38	35
	Family	9	7	8
	IOP	4	3	3
	Residential	5	3	4
Weekly Drug Tests Administered	Mean	0.66	0.75	0.72
Percent Positive Drug Tests	Mean	11 <sup>***</sup>	32	25
Rewards	Mean	16 <sup>***</sup>	5	9
Sanctions	Mean	7	6	6
% Utilize Ancillary Services		76	76	76
% Utilize Multiple Ancillary Services		61	66	64
Types of Ancillary Services				
	Academic	16	16	16
	Drug Education	53	57	55
	Mental Health Counseling	19	22	21
	Transportation	40	45	43
	Other*	55 <sup>**</sup>	35	42

\*\*\* p<.001, \*\* p<.01, \* p<.05; two-tailed tests

\*Other ancillary services include: Social Services, Mentoring Programs, Housing, Employment and Financial Services and Transportation



On average, program graduates had a lower rate of percent positive drug tests (11%) compared to expelled participants (32%). Program graduates were also less likely to be drug tested than expelled participants (.66 tests/wk compared to .75 tests/wk). And as expected, more graduates were rewarded during program participation and more expelled participants were sanctioned. Utilization of ancillary services was also more frequent among program graduates particularly with respect to social services, mentoring programs, housing, employment and financial services.

Maine's juvenile drug treatment court attempts to integrate court operations and treatment progress through a four phase system that is designed to take approximately 52 weeks to successfully complete. Referring to the figures in bold, findings in Table 13 indicate the actual amount of time required to complete the drug court program approximates but often exceeds the 52 week standard set forth in the drug courts' Policies and Procedures manual. The median length of time to graduate is 59 weeks and ranges between 31 weeks and 93 weeks.

The time it actually takes graduates to complete the program exceeds the 52 week standard largely because participants are unable to complete Phase I within the scheduled time frame. The amount of time required to complete the first phase of the program is more than double the intended scheduled length (8-10 weeks). Here, consideration might be given to increase the scheduled length of the first phase of the program so as to establish more realistic benchmarks and reasonable expectations of participant progress.

Table 13 also presents information about attendance at treatment. While the median number of treatment sessions attended is 58, treatment attendance by participants who graduated from the program range from a low of 13 sessions to a high of 230 sessions. According to the policies established by the drug court, the frequency of treatment session attendance is "open ended" and discretionary, individually tailored to meet the specific needs of the adolescent. Hence, it is not possible to compare required sessions with actual sessions attended.

It is important to note that the start and end dates of the drug court program do not necessarily correspond to actual start and end dates of treatment. Table 13 shows that the actual amount of time spent in treatment is less than the total time spent in the drug court program. Overall, the median length of time in treatment is 43 weeks, or about 73% of the total length of drug court program participation (59 weeks). Overall, the amount of time in treatment for graduates varies considerably ranging from 5 weeks to 76 weeks.

These bivariate analyses suggest that some program and participant characteristics have an effect on program completion outcomes. However, we do not know what the combined effect of all these factors are, or which are the most salient. Hence, the next section incorporates a multivariate analysis that will assist in further exploration of this issue.

### **C. Multivariate Analysis: Factors Predictive of Program Graduation**

The multivariate analysis assesses those factors that have an effect on or predict the overall odds of successful program completion while controlling for a number of "independent" or explanatory variables. Specifically, a step-wise logistic regression model is employed to test the combined effect of participant characteristics, drug test results, attendance at treatment, sanctions and incentives, and participation in ancillary services on the overall odds of graduation.

Table 14 presents results of the step-wise logistic regression model for the odds of successful program completion. Overall results indicate that five factors (one participant characteristic and four program related variables) are significant predictors of successful program completion.

First, those who were arrested with a prior property related offense are 4.3 times (inverse of 0.235) less likely to graduate than participants with no prior property offenses. Length of program participation and the frequency of rewards, as expected, is positively associated with graduation outcomes and the frequency of sanctions is negatively associated. One other significant finding pertains to those participants who received drug education services during their participation in the program. Those participants who received drug education services are 5 times more likely to graduate than those who did not.

**Table 14: Odds Ratios for the Step-wise Logistic Regression on Graduation Outcomes for Maine's State-wide Juvenile Drug Treatment Court**

<i>Variables</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>Sig.</i>	<i>Exp(B)</i>
Drug Education	1.683	.762	4.881	.027	5.381
Program Length	.157	.034	21.746	.000	1.170
Prior Property Crime	-1.447	.713	4.117	.042	.235
Rewards	.176	.044	16.045	.000	1.193
Sanctions	-.256	.070	13.428	.000	.774
Constant	-8.583	1.905	20.294	.000	.000

<sup>a</sup>Only the significant terms tested in the models are presented in order to conserve space.

## Section 4

### Recidivism Outcomes

One of the principle goals of drug court programs is to reduce the likelihood of arrests among participants. This section of the report assesses the efficacy of Maine's juvenile drug treatment court against this outcome measure. The analysis is based on a comparison of arrest rates of the 105 juvenile drug court participants who either successfully completed the program and graduated or were expelled with the arrest rates of a matched sample of 105 adolescent offenders traditionally adjudicated. The analysis includes an examination of multiple indicators of recidivism including: overall arrest rates, in-program versus post-program recidivism, arrest frequency and offense severity. A multivariate analysis examining factors predicting the overall occurrence of arrests as well as a time to arrest (survival analysis) is basic to the analysis that follows.

While there is a growing body of research literature indicating positive results for adult drug court programs, little evidence exists for juvenile drug court programs. This is largely due to the fact that the juvenile drug court program is more recent, and that juvenile drug court programs, nationally, have lower caseloads than adult drug courts making it difficult for researchers and evaluators to generate any meaningful conclusions about the efficacy of the juvenile drug court model.

Moreover, many of the studies that have been done on juvenile drug court programs lack quasi-experimental designs and few include analyses of recidivism data or utilize multivariate models to assess program outcomes. Consequently, findings that do exist are mixed and site specific. Arguably, such problems exist for a variety of reasons including constraints imposed on research projects by funding agencies, difficulties in obtaining reliable information on juvenile offenders and low overall participation rates to name a few.

Among the few program evaluations that compare recidivism rates of juvenile drug court participants with a comparison group of adolescent offenders, findings vary significantly. For example, Latessa (2002) suggests a positive effect on crime reduction for Ohio's juvenile drug court programs demonstrating a differential arrest rate of 19% between drug court participants and non-participants. This is in contrast to Logan, Hoyt, and Leukefeld (2001) and Hartmann and Rhineberger (2003) who report negative findings for the Polk County and Kalamazoo County juvenile drug court programs indicating that comparison subjects did not differ or fared better with lower rearrest rates.

The analysis that follows, then, provides a unique opportunity to examine some rare data about rearrest activity among juvenile drug court participants and more importantly, how these arrest rates compare against a matched-pair of adolescent offenders who were adjudicated through traditional criminal case processing.

Overall, these findings suggest a positive program effect with fewer juvenile drug court participants being arrested than the control group and program graduates being the least likely to re-offend overall. Juvenile drug court participants are also less likely than the control group to be rearrested for alcohol or drug related offenses or for the commission of felonies or violent crimes.

## **A. Methods**

To assess the efficacy of Maine's juvenile drug court program, the research compared differences between recidivism rates of juvenile drug court participants and similarly-situated juveniles who were traditionally adjudicated. That is, the research incorporates a quasi-experimental, matched-pair design. This approach allows the research to compare arrest rates between juvenile drug court participants and a matched grouping of juvenile offenders who did not participate in drug court. Of the 145 participants who were discharged from the drug court, only 105 had sufficient exposure, or "time at risk," to be included in the 12 month follow-up assessment. For example, a participant discharged on January 1, 2001 was tracked for 12 months until December 31, 2001 to identify whether an arrest had occurred.

The control group was constructed from information gathered from Maine's Department of Corrections and the Juvenile Treatment Network (Day One). The 105 adolescents in the drug court program were matched with 105 juvenile offenders who were not in the program across a variety of demographic characteristics, substance use history/screening results and criminal risk factors including: date of entry, age, race, gender, county of residence, ASAM score, JASAE drug and alcohol scores, Yo-LSI measure of criminal risk, living situation and school status. The exposure time or "time at risk" during which arrest activity was measured for the 105 juvenile offenders who were not in the program was the same number of days as the exposure time for the drug court participant with whom they were matched.

The Juvenile Treatment Network contained information to match the offenders. This information contained substance abuse screening test results and demographic information. The Yo-LSI measure for criminal risk for each offender was obtained from the Department of Corrections. The research team was also able to obtain substance abuse treatment attendance information for both drug court participants and control subjects using data obtained from the State Office of Substance Abuse, Treatment Data System (TDS).

Recidivism data presented in this section reflects all felony and misdemeanor arrest activity in Maine for each individual who either successfully completed the drug court program through graduation or who was expelled. Arrest data was obtained from two sources: 1) Maine's Department of Corrections, Division of Juvenile Services provided arrest information on adolescents who were still under their supervision and, 2) Maine's Department of Public Safety provided arrest data for those adolescents who turned 18 and matriculated into the adult criminal justice system.

## **B. Findings**

Findings in this section of the report are based on 210 juvenile offenders. A total of 105 of the offenders either successfully completed the program and graduated (30) or were expelled from the program (75). These 105 drug court participants were paired with 105 juvenile offenders who did not participate in the drug court program.

Recidivism data is presented in Table 15 for two different groups of offenders: drug court participants and a control group matched with the program participants on a number of variables. The drug court participants are further divided into two sub-groups - those who successfully completed the program through graduation and drug court participants who were expelled from

the program. The first column presents information about the control group of juvenile offenders with substance abuse problems who were not in drug court. The second column presents overall information about juvenile offenders who were in the drug court (experimental group). The third and fourth columns of Table 15 present recidivism data for program graduates and expelled participants and the last column provides overall totals. T-tests were performed to determine whether the differences in arrests rates were statistically significant.

Findings in Table 15 indicate that fewer drug court participants (43%) had post-program arrests than the control group (49%) but approximately the same percent of drug court participants were arrested (35%) while in drug court as non-drug court (34%) participants during a similar time-frame. More importantly, fewer graduates (40%) than expelled participants (60%) or the control group (66%) were arrested overall. This pattern of fewer arrests holds during program participation and during the 12 month post-program follow-up where fewer graduates (30%) than expelled participants (48%) or the control group (49%) were arrested.

**Table 15: Recidivism Outcomes Control and Experimental**

		<i>Control</i>		<i>Experimental</i>		<i>Graduate</i>		<i>Expelled</i>		<i>Total</i>	
Overall Arrest (Felony or Misdemeanor)		N	%	N	%	N	%	N	%	N	%
	Yes	69	66	57	54	12	40	45	60	126	60
	No	36	34	48	46	18	60	30	40	84	40
Post Program Arrests (Felony or Misdemeanor)		N	%	N	%	N	%	N	%	N	%
	Yes	52	49	45	43	9	30	36	48	96	46
	No	53	51	60	57	21	70	39	52	114	54
In-Program Arrest (Felony or Misdemeanor)		N	%	N	%	N	%	N	%	N	%
	Yes	36	34	37	35	7	23	30	40	73	35
	No	69	66	68	65	23	77	45	60	137	65

Table 16 presents arrest information by the frequency and seriousness of the offense charges (as measured by the those arrested for Class A-C felonies and Class D and E misdemeanors). Findings indicate that drug court participants are, on the whole, less likely to be arrested than the control group and less likely than the control group to be arrested for alcohol or drug related offenses. Overall, drug court graduates are the least likely to be arrested, commit felonies and/or drug and alcohol related offenses than either expelled participants or the control group. Simply put, drug court graduates are less likely to be arrested indicating a positive program effect.

**Table 16: Experimental vs. Control – Multiple Indicators of Recidivism**

<i>Post Admission Arrest Activity</i>		<i>Control</i>		<i>Experimental</i>		<i>Graduate</i>		<i>Expelled</i>		<i>Total</i>	
Arrest (Felony or Misdemeanor)		N	%	N	%	N	%	N	%	N	%
	Yes	69	66	57	54	12	40	45	60	126	60
	No	36	34	48	46	18	60	30	40	84	40
Misdemeanor Arrest											
	Yes	56	53	52	50	13	43	39	52	108	51
	No	49	47	53	50	17	57	36	48	102	49
Felony Arrest											
	Yes	13	12	12	11	1	3	11	15	25	12
	No	92	88	93	89	29	97	64	85	185	88
Drug/Alcohol Offense–F/M											
	Yes	14	13	4	4	0	0	4	5	18	9
	No	91	87	101	96	30	100	71	95	192	91
Crimes Against a Person											
	Yes	16	15	15	13	5	17	10	13	31	15
	No	89	85	90	87	25	83	65	87	179	85
Number of Arrests											
	Mean	2.5		2.7		2.7		2.7		2.6	
	Median	2.0		2.0		2.0		2.0		2.0	
	Range	1-10		1-12		1-12		1-8		1-12	
	Total Arrests	168		173		38		135		341	
Length of Time to First Arrest (months)											
	Mean	6.5		6.1		4.8		6.4		6.3	
	Median	5.4		3.8		1.7		5.1		4.9	
	Range	.13-24		.03-24		.20-24		.03-19		.03-24	

We also compared recidivism rates between experimental and control subjects controlling for participation in substance abuse treatment<sup>4</sup>. Referring to Table 17, findings indicate that drug court participants receiving substance abuse treatment (54%) are less likely to recidivate than control subjects receiving substance abuse treatment (74%). Drug court participants receiving substance abuse treatment (54%) are also less likely to be rearrested than control subjects receiving no substance abuse treatment services (61%).

It is also interesting to note that drug court participants are 3 times more likely to participate in substance abuse treatment than control subjects with equally severe levels of substance abuse. This suggests that the drug court program provides a better avenue for substance abusing adolescent offenders to obtain treatment services than offenders under traditional supervision.

<sup>4</sup> As shown in Table 17, there were a total of 6 expelled drug court participants who did not receive any substance abuse treatment during their participation in the program. Given such a small number, meaningful comparisons cannot be drawn between this group and others presented in Table 17.

**Table 17: Recidivism Outcomes Controlling for Participation in Substance Abuse Treatment**

		<i>Control With Tx</i>		<i>Experimental With Tx</i>		<i>Control No Tx</i>		<i>Experimental No Tx</i>		<i>Total</i>	
		N	%	N	%	N	%	N	%	N	%
Arrest (During Treatment/DC)	Yes	14	40	36	36	22	31	1	17	73	35
	No	21	60	63	64	48	69	5	83	136	65
Re-Arrest (12 Months Post Treatment/DC)	Yes	19	54	37	37	33	47	2	33	90	43
	No	16	46	62	63	37	53	4	67	119	57
Re-Arrest (Overall)	Yes	26	<b>74*</b>	54	<b>54*</b>	43	61	3	50	125	60
	No	9	<b>26</b>	45	<b>46</b>	27	39	3	50	84	40

\*\*\* p<.001, \*\* p<.01, \* p<.05; two-tailed tests

### C. Factors Predicting Overall Arrests Outcomes

Results from the preceding analyses suggest, on the one hand, that drug court participants had, lower recidivism rates than the control group of offenders traditionally adjudicated. On the other hand, however, these observed differences are small suggesting that they may be attributable to offender characteristics (e.g.: types of prior arrests) or offender activities (e.g.: participation in treatment). However, there are more powerful statistical techniques that enable us to better isolate the effect of drug court participation on recidivism outcomes while controlling for these additional factors. Here we employ a step-wise logistic regression, to assess what factors significantly predict the overall odds of recidivism. The logistic regression model tests the combined effect of participant demographics, attendance at treatment, criminal history patterns and drug court participation on the overall odds of rearrest. This analysis complements the preceding bivariate analyses by assessing the salience of each factor among control variables.

Results from the logistic regression analysis indicate that there are three significant variables that predict the overall occurrence of arrests. Referring to Table 18, two variables from the risk and substance abuse screens are significant. Here, offenders that are low risk and require a relatively low level of treatment intervention are two and three times less likely to recidivate than high risk/high need offenders. (This is calculated by taking the inverse of the odds ratio *Exp B*.) The last variable of significance pertains to drug court participation versus non-participation. Findings indicate that drug court participants are nearly two times less likely to recidivate than the control group of matched offenders.

**Table 18: Results from the Stepwise Logistic Regression on the Odds of Recidivism**

<i>Variables</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>Sig.</i>	<i>Exp(B)</i>
ASAM Score 1 or lower	-1.18	0.53	4.91	0.03	0.31
Low Risk	-0.69	0.32	4.66	0.03	0.50
Drug Court Participation	-0.62	0.30	4.31	0.04	0.54
Constant	1.04	0.25	16.81	0.00	2.83

We also examined factors predicting post-program recidivism outcomes. It will be recalled that results of the bivariate analysis indicated there was no significant difference between the arrest rates of drug court participants (43%) compared to the control group (49%) in the 12 month post program follow-up. That analysis actually masked the very important difference in recidivism rates between program graduates (30%) and expelled participants (48%) and did not control the combined effect of multiple explanatory variables.

Referring to Table 19, results from the step-wise logistic regression analysis on the occurrence of post-program recidivism indicate that drug court participants are nearly two times less likely to recidivate in the 12 month post-program follow-up than the control group of matched offenders. There are three variables of significance. First, those who were employed at the time of admission to the drug court (or an equivalent time frame for the control group) are two times less likely (inverse of .558) to recidivate than offenders not employed. Second, offenders with prior property related offenses are approximately 2 times more likely to recidivate than offenders with no prior property offenses. And, similar to the findings presented on the regression analysis predicting the overall occurrence of recidivism, the variable pertaining to drug court participation versus non-participation is also significant.

**Table 19: Results from the Stepwise Logistic Regression on the Odds of Recidivism**

<i>Variables</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>Sig.</i>	<i>Exp(B)</i>
Employed at Admission	-.583	.293	3.957	.047	.558
Prior Property Arrest	.845	.312	7.312	.007	2.327
Drug Court Participation	-.774	.305	6.455	.011	.461
Constant	-.136	.277	.242	.623	.873

#### **D. Survival Analysis**

The outcome measures presented thus far focused on the overall occurrence of arrests between experimental and control subjects and factors predicting those outcomes. Another different approach to assess recidivism is to examine the length of time to arrest so as to measure the overall amount of time that participants refrained from criminal behavior. Here we used survival analysis to compare the timing of recidivism between drug court participants and control subjects<sup>5</sup>.

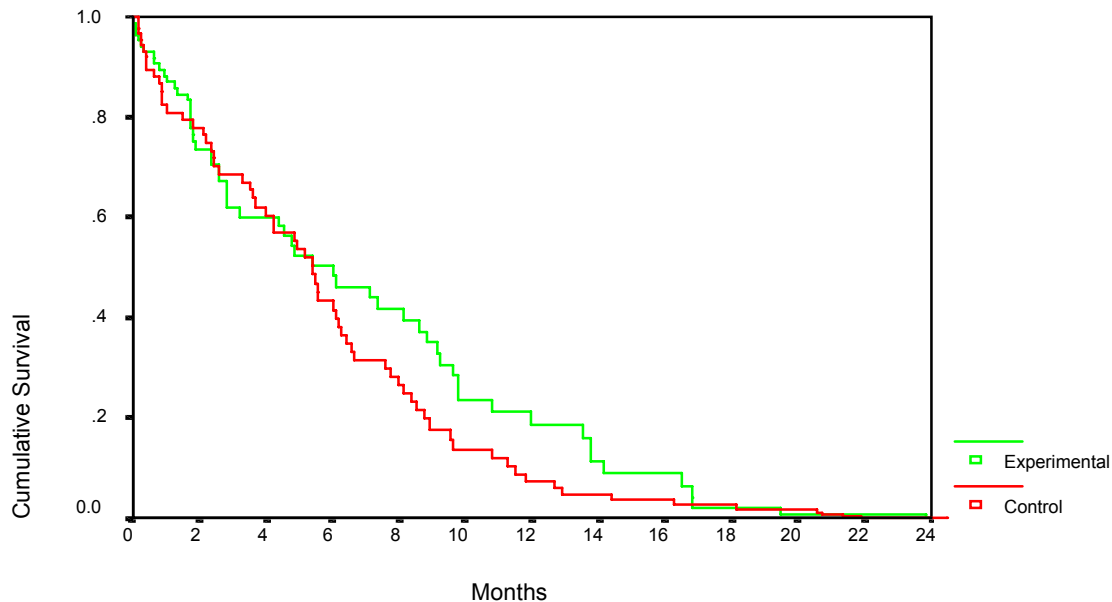
Results of the survival analysis indicate that the drug court program did not significantly delay returns to crime, as measured by months to first arrest. The graph in Figure 2 illustrates the percent of drug court program participants and control subjects not yet arrested on the vertical axis. The number of months is displayed on the horizontal axis. For example, from the point of admission to the drug court (time zero) no one had been rearrested. By the sixth month, 57% of the control subjects had not been arrested (43% had been arrested) compared with 61% of drug court participants (39% had been arrested). And at twelve months, the percentages not arrested had declined to 14% for the control subjects and 16% for drug court participants.

<sup>5</sup> Because of its flexibility, a Cox regression (proportional hazards model) model will be employed as it is commonly used to analyze failure time data in the presence of censored cases (i.e.: the number of missing observations in which some offenders were not rearrested during the period of investigation).



As in the case of the logistic regression analyses above, we also included several covariates (predictor variables) in the Cox regression model to examine factors predictive of desistence from new criminal activity. Results of the analysis indicate that there is only one variable that significantly predicts the overall rate of time to failure – employed at admission. Offenders who were not employed at the time of admission are significantly more likely to recidivate sooner than offenders who were employed ( $B = -.478$ ,  $SE = .214$ ,  $p < .05$ ).

**Figure 2: Survivor Function Estimate of Months to First Arrest**



Overall findings in this section of the report indicate a positive program effect with fewer juvenile drug court participants (54%) being arrested than the control group (66%) and, more importantly, program graduates (40%) being the least likely to re-offend overall. Results of the multivariate analyses indicate that drug court participants are nearly two times less likely than the control group to be arrested overall as well as in the 12 month post-program follow-up period. In sum, with the exception of findings from the survival analysis, juvenile drug court participants fared better than the control group across multiple indicators of recidivism including overall rearrest frequency and offense severity.

## Section 5

### Conclusions and Recommendations

The mission of Maine's juvenile drug court is *"to improve the quality of juvenile justice in Maine through timely and effective substance abuse, social services, and juvenile justice interventions"*. The degree to which the juvenile drug court program successfully meets these goals is directly related to the degree of collaboration that develops between the various agencies involved with the program in such matters as sharing resources, identifying and reaching the targeted population and selecting juvenile offenders who meet established eligibility criteria. The drug court program inspires a collaborative process to assemble and direct a variety of resources from numerous agencies towards the achievement of mutual goals. In this respect, juvenile drug courts are not intended to provide a "quick fix" rather, they are designed to overcome the boundaries of historically independent systems (Hartmann and Rhineberger, 2002).

This report has provided a rigorous assessment of Maine's juvenile drug treatment court program. Overall, there are three important findings about the programs' overall effectiveness:

1. Juvenile drug court participants have significantly lower overall arrest rates than a comparison group comprised of a matched pair of offenders traditionally adjudicated.
2. Juvenile drug court participants are significantly more likely than non-drug court participants to participate in substance abuse treatment.

Policy makers should now be convinced that the juvenile drug court can be an effective intervention to reduce recidivism for substance abusing adolescent offenders. However, results of the study should also remind policy makers that juvenile drug courts are effective for only some juvenile offenders. As previously mentioned, drug courts are not a magic bullet. Many drug court participants fail to graduate.

Not only should policy makers have realistic expectations about the overall impact of juvenile drug courts, they should also attempt to improve the existing program so as to improve overall outcomes. High rates of program failure suggest the need to re-examine some of the technical flaws identified in this report. Policy makers need to ensure that offenders admitted to the program reflect an appropriate target population. Providing treatment services commensurate with the treatment needs of participants is also likely to improve outcomes. Hence, the evaluators recommend the following actions to be considered in order to further improve the effectiveness of the program:

- ❑ The juvenile drug courts have the potential to become cost-effective, however, in order to do so, the number of participants must be increased. Those drug court sites struggling to reach capacity should consider working more closely with and encourage the primary sources of their referrals (defense counsel and JCCO's) to participate in increasing enrollments in their jurisdictions. Information flow might be increased and focus groups might be considered.

- ❑ Extend the scheduled length of the first phase of the program so as to establish more realistic benchmarks and reasonable expectations for participants and their families to assess their progress in the initial phase of the program.
- ❑ Continue to maintain the current level of drug testing to meet the standards that key actors in the program believe are necessary. Our data indicate that frequent drug testing is positively correlated with fewer positive tests. However, the frequency of drug testing remains relatively flat across phases which does not reflect the “step-down system” recommended by policy and supported by key actors in the drug court program.
- ❑ The current average length of time from initial referral to admission is 49 days and ranges from 7-280 days. Hence, local drug court team members ought to work out ways to meet early identification and prompt placement standards set forth in the policy and procedures manual of the drug court program.
- ❑ Consider building stronger relationships with schools and the business community so as to support the long-term goals of assisting participants to develop positive relationships in the community and obtaining the necessary skills to become productive citizens.
- ❑ Nearly half (46%) of all drug court team members indicate that the current use of sanctions and incentives is not an effective tool to secure compliance to program requirements. Findings indicate that sanctions are indeed graduated, however, only slightly. Here, consideration should be given to developing a structured sanctions protocol that is consistent with effective behavioral management techniques in order to improve outcomes.
- ❑ Continue to ensure that local drug court practitioners receive nationally recognized training.

In addition, we cannot ignore evidence of the larger impacts of drug courts on the criminal justice and treatment systems. The drug court model has served as a major catalyst for change as it has been transformed into a more generalized “problem solving” approach (such as domestic violence courts). The drug court model has led to a new working relationship between different agencies of government and between the judiciary and the treatment system (Goldkamp, 2003). Locally, state officials do not seriously debate whether drug courts are appropriate or effective. Instead, attention is focused on how to involve more clients and professionals into these specialized courts and how to integrate these programs into the broader fabric of the judicial and treatment systems.

## References

- Belenko, S. *Research on Drug Courts: A Critical Review. 2001 Update*. New York: The National Center on Addiction and Substance Abuse at Columbia University. 2001
- Cooper, Caroline S. et al. *2000 Drug Court Survey Report. Part I: Judicial Perspectives*. OJP Drug Court Clearinghouse and Technical Assistance Project. American University. October 2001. Draft.
- Cox, D.R. *Regression Models and Life Tables (with discussion)*. Journal of the Royal Statistical Society, B34, 187-220. 1972
- Goldkamp, J.S. White, J.B. and Robinson. *Do Drug Courts work? Getting Inside the Drug Court Black Box*. Journal of Drug Issues. 31: 27-72. 2001
- Goldkamp, J.S. *Reaction Essay: The Impact of Drug Courts*. Criminology and Public Policy. 2:2. 197-199. March 2003
- Hartmann, D., Rhineberger, G. *Evaluation of the Kalamazoo County Juvenile Drug Treatment Court Program*. Kercher Center for Social Research. Western Michigan University. September 2002
- Hester R.K., Miller W.R. *Handbook of Alcoholism Treatment Approaches: Effective Alternatives*. 2 ed. Neddham Heights MA: Allyn and Bacon. 1995
- Huff, D., Stageberg P., Wilson B. and Moore, R. *An Assessment of the Polk County Juvenile Drug Court*. Iowa Statistical Analysis Center. 2001
- Juvenile Drug Court Activity Update: *Summary Information*. OJP Drug Court Clearinghouse and Technical Assistance Project. American University. 2003
- Latessa, E.J., Shaffer, D.K. & Loenkamp, C. Outcome evaluation of Ohio's Drug Court efforts: Final Report. University of Cincinnati. 2002
- Marlowe, D. *Effective Strategies for Intervening With Drug Abusing Offenders*. Villanova Law Review. Vol. 47: 989. 2002.
- Peters, R.H. and Murrin, M.R. Predictors of retention and arrest in Drug Courts. *National Drug Court Institute Review*, 2 (1), 33-60. 1999
- Taxman, Faye. *Unraveling "What Works" for Offenders in Substance Abuse Treatment Services*. National Drug Court Review. 2000

## **Appendix A**

### Scenario 1

Debra has been in the drug court program for two months. She is 16 years old, lives with her mother and is trying to enroll back in school. Her drug of choice is opiates and she has three prior misdemeanor convictions – all property related. To date, she has received two sanctions: a verbal reprimand for an unexcused absence at treatment (week two) and a curfew restriction for violating a no contact order with one of her friends (week four). She has received verbal praise from the bench since then and received a gift certificate last week. Two days ago, she failed to attend a scheduled session with treatment, quit her part-time job and arrived at home two hours after curfew. Her explanation to her case manager was that “she feels too confined.” All drug and alcohol tests have been negative. Today is drug court. What, if anything, should happen to Debra?

<i>Should Happen (n)</i> <i>Likely to Happen (n)</i>	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>
Incarceration	2 2	0 0	0 0	0 0	2 2	0 0
Community Service	2 4	3 3	2 2	1 1	2 2	1 1
Increase Testing	1 1	0 0	0 0	0 0	0 0	0 0
Increase Reporting	2 2	0 0	0 0	0 0	0 0	0 0
Written Assignment	4 4	2 2	2 2	0 0	2 2	1 1
Increased Treatment	0 0	1 1	1 1	0 0	1 1	0 0
Verbal Caution	4 4	3 3	2 2	0 0	2 2	0 0
Termination	0 0	0 0	0 0	0 0	0 0	0 0
Phase Demotion	0 0	0 0	0 0	0 0	0 0	0 0
Other	3 3	0 0	1 1	1 1	1 1	1 1

## Scenario 2

John has been in the drug court program for two weeks. He is 15 years old, lives with his grandparents and is enrolled in school full-time. His drug of choice is marijuana and he has one prior assault conviction. He has recently tested positive for alcohol (.04) and has been suspended for initiating a fight at school. He has been compliant with all other program requirements. His explanation is that he used mouthwash prior to the test and that the fight was in self-defense having been instigated by others. Today is drug court. What, if anything, should happen to John?

<i>Should Happen (n)</i> <i>Likely to Happen (n)</i>	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>
Incarceration	0 / 0	4 / 2	0 / 1	1 / 1	2 / 2	1 / 2
Community Service	2 / 2	1 / 2	1 / 0	5 / 4	2 / 2	1 / 0
Increase Testing	2 / 1	3 / 4	1 / 1	3 / 1	0 / 0	1 / 0
Increase Reporting	1 / 1	0 / 0	0 / 0	1 / 2	0 / 0	0 / 0
Written Assignment	4 / 4	1 / 1	1 / 2	3 / 4	2 / 2	1 / 1
Increased Treatment	1 / 4	1 / 3	1 / 1	1 / 3	1 / 1	0 / 0
Verbal Caution	5 / 5	2 / 3	2 / 2	2 / 3	2 / 2	0 / 0
Termination	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
Phase Demotion	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0
Other	1 / 2	0 / 0	1 / 1	2 / 5	1 / 1	1 / 2

### Scenario 3

Jim has been in the drug court program for twelve months and is due to graduate in three weeks. He is 18 years old and has completed his GED. His drug of choice is opiates and he has eight prior misdemeanor and felony convictions – all substance use related. To date, he has received various sanctions for drug use, missing scheduled appointments and violating a no contact order. However, he has been drug free and compliant with program expectations for the past five months. Jim was arrested yesterday for use of a stolen credit card. Aside from whatever penalty Jim may receive for this new charge, what, if anything, should happen to him in drug court?

<i>Should Happen (n)</i> <i>Likely to Happen (n)</i>	<i>Augusta</i>	<i>Bangor</i>	<i>Biddeford</i>	<i>Lewiston</i>	<i>Portland</i>	<i>West Bath</i>
Incarceration	3 3	2 3	1 2	0 0	3 3	0 0
Community Service	0 1	1 3	0 0	0 1	1 1	0 0
Increase Testing	0 0	1 1	0 0	0 0	1 0	0 0
Increase Reporting	0 0	0 0	0 0	0 0	0 0	0 0
Written Assignment	0 0	1 0	1 0	0 0	3 1	0 0
Increased Treatment	0 0	0 0	0 0	0 0	1 0	0 0
Verbal Caution	0 1	1 1	0 0	0 1	0 0	0 0
Termination	4 3	0 1	0 0	0 0	3 3	0 0
Phase Demotion	1 0	1 1	2 2	0 0	4 0	0 0
Other	1 3	1 0	1 0	1 0	4 2	1 0